

Materials Engineering Branch



TIP*

No. 037 Bonding Polyester Film

Author(s): Frederick Gross Contact: (301) 286-6882

Mylar and Melinex comprise a widely diverse line of polyester films produced by DuPont Teijin Films. Mylar films have been on the market for over 50 years and are used in the manufacture of many types of commercial and aerospace products. Untreated polyester films cannot be readily bonded because of the inert nature of the surface of the product as usually manufactured. DuPont Teijin produces over 200 varieties of the polyester film in order to satisfy the various needs of their consumers. Some of the choices include heat-sealable on one or both sides, solvent bondable on one or both sides, anti-static on one or both sides, different thickness and widths of all of the above, etc. Therefore, some thought must be given to the choices made when purchasing the product.

The bonding can be done using the company's recommended solvent bonding procedure. An approved transfer film adhesive may also be used or a more conventional adhesive might be chosen such as an approved polyurethane or epoxy. The choice of the bonding procedure is an individual decision based on the circumstances of the task, which would include knowledge of the substrates, temperature requirements and other hardware and environmental conditions.

The DuPont Teijin customer service line at 800-635-4639 can provide specific information on their numerous products' properties. Recommended adhesives and other materials information may be obtained from the Materials Engineering Branch at GSFC.